MAR 0 2 2007

(List 2-3)

Substitute	for form 1449A/PTO		1	Complete if Known		
INFO	RMATION I)ISCI	OSHDE	Application Number	10/642,305	
				Filing Date	August 18, 2003	
SIA	STATEMENT BY APPLICANT			First Named Inventor	Hongyong ZHANG et al.	
}	(use as many sheets a	as necessa	(ניזו	Art Unit	2811	
	•			Examiner Name	Douglas W. Owens	
Sheet	1	of .	5	Attorney Docket Number	740756-2646	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.)., date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²				
/DWO/	1	PERRIN, J. et al., "Mass-Spectrometric Study of NF3 Plasma-Etching of Silicon", Plasma Chemistry and Plasma Processing, Vol. 10, No. 4, (1990) pp. 571-587					
/DWO/	2	GROVE, A.S., "Physics and Technology of Semiconductor Devices", Wiley (New York), (1967), p. 334.					
/DWO/	3	GORDON, R. "Chemical Vapor Deposition of Coatings on Glass", Journal of Non- Crystalline Solids, Vol. 218, (1997), pp. 81-91.					
/DWO/	4	BALK, P. et al. "Phosphosilicate Glass Stabilization of FET Devices", Proceedings of the IEEE; Vol. 57, No. 9, (September 1969), pp.1558-1563.					
/DWO/	5	PLUMMER et al.; "Silicon VLSI Technology: Fundamentals, Practice and Modeling"					
/DWO/	6	NICOLLIAN, E.H. et al.; "MOS (Metal Oxide Semiconductor Physics and Technology", Wiley (New York) p. 774.					
/DWO/	7	Sze S.M. (Author ADAMS, A.C.), "VLSI Technology" Wiley, (New York) (1983) pp. 93-129.					
/DWO/	8	KRIEGLER, R.J, "Neutralization of Na+Ions in HC1-Grown Si02", Applied Physics Letters, Vol. 20, No. 11, (June 1, 1972), pp. 449-541.					
/DWO/	9	DEAL, B.E. et al. "Chlorine Concentration Profiles in 0.2 -HCl and H ₂ 0- HCl Thermal Silicon-Oxides Using Sims Measurements", Journal of the Electrochemical Society, Vol. 125, No. 12, (December 1978), pp. 2024-2027.					
/DWO	10	ROHATGI, A. et al. "Sodium Passivation in HCl Oxide-Films on Si", Applied Physics Letters, Vol. 30, No. 2, (January 15, 1977) pp. 104-106.					

Examiner	/Douglas W Owens/	·	Date	05/14/2007
Signature	, 200 g.a.o		Considered	03/14/2007

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached

MAR 0 2 2007

(List 2-3)

Complete if Known Substitute for form 1449A/PTO 10/642,305 Application Number INFORMATION DISCLOSURE August 18, 2003 Filing Date STATEMENT BY APPLICANT Hongyong ZHANG et al. First Named Inventor (use as many sheets as necessary) 2811 Art Unit Douglas W. Owens Examiner Name of Sheet Attorney Docket Number 740756-2646

٠.		OTHER PRIOR ART – NON PATENT	LITERATURE D	OCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETT item (book, magazine, journal, serial, symposium publisher, city and/o	i, catalog, etc.)., date	, page(s), volume-issue number(s),	T²			
/DWO/		ROHATGI A,, et al. "Chlorine Incorporate Electrochemical Society, Vol. 126, No. 1,						
/DWO/		ROHATGI A., et al. "Mobile Sodium Ion Passivation in HCl Oxides," Journal of the Electrochemical Society, Vol. 126, No. 1, (January 1979), pp. 149-154.						
/DWO/		WILLIAMS, R. et al. "Mobile Fluoride Io 46, No. 2 (February 1975) pp. 695-698	ns in SiO2", <u>J</u> e	ournal of Applied Physics, Vol.				
/DWO/		LEE, M.K. et al. "Control of Silicon Dioxi the Electrochemical Society, Vol. 130, No.	•					
/DWO/		DASILVA, E.F. et al. "Radiation Respons Oxides, IEEE Transaction on Nuclear Scientification on Nuclear						
/DWO/		NISHIOKA, Y. et al. "Dramatic Improven Degradation in MOS Structures Containin Letters, Vol. 9, No. 1, (Jan. 1988), pp. 38-4	g F or Cl in S					
/DWO/		NISHIOKA, Y. et al. "Dielectric Characte Physics Letters, Vol. 54, No. 12, (March 2						
/DWO/		NISHIOKA, Y. et al. "Hot-Electron Hardened Si-Gate MOSFET Utilizing F-Implantation", IEEE Electron Device Letters, Vol. 10, No. 4, (April 1989), pp. 141-143.						
/DWO/		BRUNO, G. et al. "Study of the NF ₃ Plasma Cleaning of Reactors for Amorphous-Silicon Deposition", Journal of Vacuum Science & Technology A, Vol. 12, No. 3, (1994), pp. 690-698						
/DWO/		JANSEN, F. et al. "Contamination Effects Journal of Vacuum Science & Technology						
Examiner Signature	//	Douglas W Owens/	Date Considered	05/14/2007	1,			

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

					CHOEWAS TO	
Substitute	for form 1449A/PTO			Complete if Known		
INFORMATION DISCLOSURE				Application Number	10/642,305	
				Filing Date	August 18, 2003	
SIAI	STATEMENT BY APPLICANT			First Named Inventor	Hongyong ZHANG et al.	
	(use as many sheets a	us necessa	(עריי)	Art Unit	2811	
				Examiner Name .	Douglas W. Owens	
Sheet	3	of	5	Attorney Docket Number	740756-2646	

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Cite Initials No. 1		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.)., date, page(s), volume-issue number(s), publisher, city and/or country where published.			
/DWO/		KARULKAR, P.C. et al., "XPS AES Investigation of Cross Contamination in a Plasma Etcher", Journal of Vacuum Science & Technology B, Vol. 3, No. 3, (1985), pp. 889-891			
/DWO/		Exhibit 7, Asserted Claim Chart - Sano Reference, JP 64-35959			
/DWO/		FRANCOIS-SAINT-CYR, et al. "Diffusion of 18 elements implanted into thermally grown Si02", Journal of Applied Physics, Vol. 94, No. 12, (December 15, 2003), pp. 7433-7439			
/DWO/		DATAR, S.A. et al. "AMS Studies of the Diffusion of Chlorine in Silicon-Wafers" Nuclear Instruments & Methods in Physics Research- B 99 - Beam Interactions with Materials and Atoms, (1995), pp. 549-552			
/DWO/		TSENG, H.H. et al. "Fluorine Diffusion on a Polysilicon Grain-Boundary Network in Relation to Boron Penetration from P+ Gates", IEEE Electron Device Letters, Vol. 13, No. 1, (January 1992), pp. 14-16			
/DWO/		TROXELL, JOHN R. et al. "Polycrystalline Silicon Thin-Film Transistors on a Novel 800°C Glass Substrate", [EEE Electron Device Letters, Vol. 7, No. 11, (November 1986), pp. 597-599			
/DWO/		ERMOLIEFF, A. et al. "XPS Studies of Contamination of Reactor and Silicon Surfaces Caused by Reactive Ion Etching", Semiconductor Science and Technology, Vol. 6, (1991), pp. 290-295			
/DWO		ERMOLIEFF, A. et al. "X-Ray Photoelectron-Spectroscopy Studies of Contamination and Cleaning of Surfaces Exposed to a Flurocarbon Plasma", Journal of Vacuum Science & Technology A, Vol. 9, No. 6, (November/December 1991), pp. 2900-2906			

Examiner	/Douglas W Owens/	Date	05/14/2007
Signature	/Douglas VV OWCHS/	Considered	03/14/2007

[•]EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

				·	\3
Substitute	Substitute for form 1449A/PTO				Complete if Known
INFORMATION DISCLOSURE			AGUE	Application Number	10/642,305
	STATEMENT BY APPLICANT			Filing Date	August 18, 2003
SIAI				First Named Inventor	Hongyong ZHANG et al.
-	(use as many sheets a	is necessa	אמי	Art Unit	2811
			Examiner Name	Douglas W. Owens	
Sheet	4	of	5	Attorney Docket Number	740756-2646

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.)., date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/DWO/		HUGHES, C. et al. "In-situ HDP-CVD Process Diagnostics Based on Quadrupole Mass Spectrometry", (IMEC Leuven, Belgium)	
/DWO/		IQBAL, Z. et al. "Raman scattering from hydrogenated microcrystalline and amorphous silicon", J. Phys. C. Solid State Phys., Vol. 15 (1982) pp. 377-392	
/DWO/		JENG, S.P. et al. "Anomalous Diffusion of Fluorine in Silicon", Applied Physics Letters, Vol. 61, No. 11, (September 14, 1992), pp. 1310-1312	
/DWO/		YOUNG, N.D. et al. "Mobile ion instabilities in polycrystalline silicon thin film transistors" Applied Surface Science, Vol. 39, (1989), pp. 364-367	
/DWO/		SAMESHIMA et al. "XeCl Excimer Annealing Used to Fabricate Poly-Si TFT's", IEEE Electronic Device Letters, Vol. 7, No. 5, (May 1986), pp. 276-278	
/DWOį		KAKKAD et al. "Crystallized Si films by low-temperature rapid thermal annealing of amorphous silicon", J. Applied Physics, Vol. 65, No. 5, (March 1, 1989), pp, 2069-2072	
/DWO/		PINARBASI, M. et al., "Hydrogenated Amorphous Silicon Films Deposited by DC Planar Magnetron Reactive Sputtering", Superlattices and Microstructure, Vol. 3, No. 4, (1987) pp. 331-340	
/DWO/		MADAN, A. et al. "Characterization of Schottky Barriers", The Physics and Applications of Amorphous Semiconductors, Academic Press, pp. 193-197	
/DWO/		MADAN et al. "Use of PECVD System in Thin Film Technology", Workshop on Industrial Plasma Applications, pp. 1-10	
/DWO/		MALEY, N. ct al. "Infrared absorption and thermal evolution study and hydrogen bonding in a-SiH", Journal of Vacuum Science & Technology, Vol. 7, No. 3, (May/June 1989), pp. 1267-1270	

Examiner Signature	/Douglas W Owens/	Date Considered 05/14/2007	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 144	9A/PTO		С	omplete if Known
PINFORMAT	ON DISC	TGHEOL	Application Number	10/642,305
CT A SIRMEN	T DV A DD	LICANT	Filing Date	August 18, 2003
STARRMEN			First Named Inventor	Hongyong ZHANG et al.
0 2 2007 (ise as ma	ny sheets as necesso	(עריי)	Art Unit	2811
<u>8</u> 9/		·	Examiner Name	Douglas W. Owens
Sheet A	of ·	5	Attorney Docket Number	740756-2646

			U.S. PATENT DOCUM	ENTS	
Examiner Initials*	Cite No.	U.S. Patent Document Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/DWO/		US-4,007,294	02/08/1977	Woods et al.	
7DW07		US-4,485,146	11/27/1984	Mizuhashi et al	
/DWO/		US-4,657,616	04/14/1987	Benzing et al.	
/DWQ/		US-4,786,352	11/22/1988	Benzing	
/DWO/		US-4,851,363	07/25/1989	Troxell et al.	
/DWO/		US-7,097,716 B2	08/29/2006	Barnes et al.	
		US-			

		FC	REIGN PATENT D	OCUMENTS			
Examiner Initials	Cite No.¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Τφ	
		Country Code ³ Number ⁴ (if known)					
7DWO7		JP 64-35959	02/07/1989				
7DWO/		JP 01-268064	10/25/1989			FULL	
 	 					ļ	
···· ,			·			<u> </u>	
	•	OTHER PRIOR	ART – ŅON PATENT L	ITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the auth item (book, magazine, jou	umal, serial, symposium,	RS), title of the article (when appro catalog, etc.)., date, page(s), volume country where published.	page(s), volume-issue number(s),		
					· · · · · · · · · · · · · · · · · · ·		
							

Examiner	/Douglas W Owens/	Date	05/14/2007
Signature	/Bodgido W OWOHO!	Considered	03,11200.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

DIPE

bubstitute for form 1449A/PTO

FORMATION DISCLOSURE TATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known			
Application Number	10/642,305		
Filing Date	August 18, 2003 Hongyong ZHANG et al. 2811 Douglas W. Owens		
First Named Inventor			
Art Unit			
Examiner Name			
Attorney Docket Number	740756-2646		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.)., date, page(s), volume-issue number(s), publisher, city and/or country where published.		T²	
/DWO/	1	Toppoly's Opposition Claim Construction Brief, May 30, 2006		
/DWO/	2	Declaration of Hector G. Gallegos in Support of Toppoly Optoelectronics Corp's. Opposition Claim Construction Brief, May 30, 2006		
/DWO/	3	Plaintiff and Counterclaim Defendant Semiconductor Energy Laboratory Co., Ltd.'s Memorandum of Points and Authorities in Opposition to Defendants' and Counterclaim Plaintiffs' Claim Construction Brief (signed on 05/26/2006), May 30, 2006		
/DWO/	4	Supplemental Declaration of Reginald J. Hill in Support of Semiconductor Energy Laboratory Co., Ltd.'s Claim Constructions (signed on 05/26/2006), May 30, 2006		
/DWO/	5 .	Toppoly Optoelectronics Corp.'s Supplemental Response to Semiconductor Energy Laboratory Co., Ltd.'s Interrogatory No. 4, June 21, 2006		
/DWO/	6	Order: Claim Construction Ruling, July 25, 2006		
/DWO/	7	Invalidity Report of Professor Gottlieb S. Oehrlein, September 22, 2006		
/DWO/	8	Expert on the Invalidity of U.S. Patents 5,352,291, Zhang et al. No. 6,177,302B1, Yamazaki et al., and No. 6,566,175B2, Yamazaki et al., by S. Wagner, September 24, 2006		
			ļ	

(List 1)

Examiner	/Douglas W Owens/	Date	05/14/2007	
Signature	, bodgida vi o ii o ii o	Considered	1 00/1 //2001	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.